## WHAT IS CLAIMED IS:

15

A testing apparatus using a DNA microarray,
 comprising:

a reading unit configured to read a hybridization pattern in a DNA microarray containing a first DNA probe group which can be used to identify a subject and a second DNA probe group which can be used to test a specimen;

an identification unit configured to analyze a

10 pattern corresponding to the first DNA probe group from
the hybridization pattern read by said reading unit to
identify the subject; and

a generation unit configured to analyze a pattern corresponding to the second DNA probe group from the hybridization pattern read by said reading unit to generate test information.

The apparatus according to claim 1, further comprising

a storage unit configured to store the subject 20 and a past test result, and

a unit configured to read out, from said storage unit, the past test result of the subject identified by said identification unit.

The apparatus according to claim 1, wherein
 the DNA microarray has a first identification indicator which indicates a probe structure of the first DNA probe group,

said reading unit further comprises a unit configured to read the first identification indicator, and

said identification unit analyzes the hybridization pattern of the first DNA probe group read by said reading unit, on the basis of the structure of the first DNA probe group recognized based on the first identification indicator.

The apparatus according to claim 1, wherein
 the DNA microarray has a second identification indicator which indicates a probe structure of the second DNA probe group,

15

20

and

said reading unit further comprises a unit configured to read the second identification indicator,

said generation unit analyzes the hybridization pattern of the second DNA probe group read by said reading unit, on the basis of the structure of the second DNA probe group recognized based on the second identification indicator.

- 5. The apparatus according to claim 1, wherein the DNA microarray has an identification indicator which specifies the DNA microarray itself, and specifies the subject on the basis of the identification indicator.
- 25 6. A testing method using a DNA microarray, comprising:

a reading step of reading a hybridization pattern

in a DNA microarray containing a first DNA probe group which can be used to identify a subject and a second DNA probe group which can be used to test a specimen;

an identification step of analyzing a pattern corresponding to the first DNA probe group from the hybridization pattern read in the reading step to identify the subject; and

a generation step of analyzing a pattern corresponding to the second DNA probe group from the hybridization pattern read in the reading step to generate test information.

10

25

- 7. The method according to claim 6, further comprising a step of reading out, from a storage unit configured to store the subject and a past test result,
- 15 the past test result of the subject identified in the identification step.
- The method according to claim 6, wherein
   the DNA microarray has a first identification
   indicator which indicates a probe structure of the
   first DNA probe group,

the reading step further comprises a step of reading the first identification indicator, and

in the identification step, the hybridization pattern of the first DNA probe group read in the reading step is analyzed on the basis of the structure of the first DNA probe group recognized based on the first identification indicator.

- 9. The method according to claim 6, wherein the DNA microarray has a second identification indicator which indicates a probe structure of the second DNA probe group,
- the reading step further comprises a step of reading the second identification indicator, and

in the generation step, the hybridization pattern of the second DNA probe group read in the reading step is analyzed on the basis of the structure of the second DNA probe group recognized based on the second identification indicator.

10. A testing apparatus using a DNA microarray, comprising:

10

20

- a reading unit configured to read a hybridization

  15 pattern from a DNA microarray containing a first DNA

  probe group which can be used to identify a subject;
  - a first acquisition unit configured to analyze a pattern corresponding to the first DNA probe group from the hybridization pattern read by said reading unit to acquire identification information of the subject;
  - a second acquisition unit configured to read a medical information card held by a subject to acquire identification information of the subject recorded on the medical information card; and
- a comparison unit configured to compare the pieces of identification information acquired by said first and second acquisition unit.

11. The apparatus according to claim 10, wherein the DNA microarray contains a second DNA probe group which can be used to test a specimen, and

the apparatus further comprises a generation unit configured to analyze a pattern corresponding to the second DNA probe group from the hybridization pattern read by said reading unit to generate test information.

5

20

25

- 12. The apparatus according to claim 11, further comprising a first recording unit configured to, when
- 10 it is determined as a result of comparison by said comparison unit that the subject identified on the basis of the first DNA probe group coincides with that recorded on the medical information card, record the test information generated by said generation unit on the medical information card.
  - 13. The apparatus according to claim 11, further comprising an output unit configured to output a warning when it is determined as a result of comparison by said comparison unit that the subject identified on the basis of the first DNA probe group does not coincide with that recorded on the medical information card.
  - 14. The apparatus according to claim 12, further comprising a second recording unit configured to, when the identification information of the subject is not recorded on the medical information card, record the identification information acquired by said first

acquisition unit on the medical information card.

15. A testing method using a DNA microarray, comprising:

a reading step of reading a hybridization pattern from a DNA microarray containing a first DNA probe group which can be used to identify a subject;

a first acquisition step of analyzing a pattern corresponding to the first DNA probe group from the hybridization pattern read in the reading step to acquire identification information of the subject;

10

15

a second acquisition step of acquiring identification information of a subject recorded on a medical information card held by the subject; and

a comparison step of comparing the pieces of identification information acquired in the first and second acquisition steps.

- 16. The method according to claim 15, wherein the DNA microarray contains a second DNA probe group which can be used to test a specimen, and
- the method further comprises a generation step of analyzing a pattern corresponding to the second DNA probe group from the hybridization pattern read in the reading step to generate test information.
- 17. The method according to claim 16, further
  25 comprising a first recording step of, when it is determined as a result of comparison in the comparison step that the subject identified on the basis of the

first DNA probe group coincides with that recorded on the medical information card, recording the test information generated in the generation step on the medical information card.

5 18. The method according to claim 16, further comprising an output step of outputting a warning when it is determined as a result of comparison in the comparison step that the subject identified on the basis of the first DNA probe group does not coincide

with that recorded on the medical information card.

- 19. The method according to claim 17, further comprising a second recording step of, when the identification information of the subject is not recorded on the medical information card, recording the
- 15 identification information acquired in the first acquisition step on the medical information card.
  - 20. A DNA microarray comprising:

a first DNA probe group which can be used to identify a subject; and

- a second DNA probe group which can be used to test a health condition of the subject.
  - 21. The microarray according to claim 20, wherein the first DNA probe group is constituted by probes corresponding to genes of major histocompatibility
- 25 complex.

10

22. The microarray according to claim 20, further comprising a probe identification indicator to identify

- a probe structure of at least one of the first and second DNA probe groups.
- 23. The microarray according to claim 20, further comprising an identification indicator that identifies the DNA microarray itself.
- 24. The apparatus according to claim 11, further comprising a reading inhibition unit configured to, when it is determined as a result of comparison by said comparison unit that the identification information of the subject from the first DNA probe group does not coincide with the identification information of the subject recorded on the medical information card, inhibit to read the hybridization pattern of the second DNA probe group.
- 25. The method according to claim 16, further comprising a reading inhibition step of, when it is determined as a result of comparison in the comparison step that the identification information of the subject from the first DNA probe group does not coincide with the identification information of the subject recorded on the medical information card, inhibiting a read of the hybridization pattern of the second DNA probe group.